**Mr. Wells**

**AP Environmental Science**

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Introduction to the Course:

AP Environmental Science (APES) is a laboratory and field-based course designed to provide students with the content and skills needed to understand the various interrelationships in the natural world, to identify and analyze environmental problems and to propose and examine solutions to these problems. The course is intended to be the equivalent of a one-semester college course, which is taught over two semesters at Latin. The course encompasses human population dynamics, energy flow in ecosystems, resources, interrelationships in nature, human impacts on environmental systems, environmental quality, and environmental law. Biology and Chemistry are prerequisites for this course.

It is expected that the APES student will have strong academic skills, self-discipline, purposeful ambition, intellectual curiosity, willingness to learn independently and as part of group, and a creative mindset. Students need to approach this AP course with the understanding that greater dedication and effort is required for success. Attendance, physical and mental is a must. Students should find this class compelling and exciting, but should not underestimate its difficulty or the fact that it will make significant demands on their time.

Each AP course concludes with a college-level assessment developed and scored by college and university faculty as well as experienced AP teachers. AP Exams are an essential part of the AP experience, enabling students to demonstrate their mastery of college-level course work.

Required Texts:

* Friedland, A. J., Relyea, R., Courard-Hauri, D., & W.H. Freeman and Company. (2012). Environmental science for AP\*. New York: W. H. Freeman.
* Easton, T. A. (2013). Taking sides. New York, NY: McGraw-Hill.
* Franklin, H. B. (2007). The most important fish in the sea: Menhaden and America. Washington: Island Press/Shearwater Books.

First Quarter:

**Unit 1: Introduction to Environmental Science –**

The first unit of the course will acquaint students with environmental science; it introduces much of the important theory, philosophy, rhetoric, and terminology which will be used throughout the course.

* Pretest
* Studying the State of Our Earth
* Environmental Systems

**Unit 2: The Living World –**

The second unit of the course focuses on the major biochemical cycles of the planet, and global climate patterns across terrestrial and aquatic biomes. It closes with the evolution of biodiversity, including contemporary concerns surrounding pesticide and pharmaceutical drug resistance.

* Ecosystem Ecology
* Global Climates and Biomes
* Evolution of Biodiversity

Second Quarter:

**Unit 3: Biological and Human Populations –**

The third unit explores factors that determine the growth of biological and human populations. This includes ecological interactions, natural events, and human choices and behaviors.

* Population and Community Ecology
* The Human Population

**Unit 4: Earth Systems and Resources –**

The fourth unit looks at the physical Earth, its physical systems, and the global distribution of resources. Additionally, students will become acquainted with the processes that influence water distribution and access.

* Earth Systems
* Water Resources

**Unit 5: Land Use –**

The fifth unit offers opportunity to investigate land classification and use. The implications of agriculture and aquaculture will also be examined.

* Public and Private Land
* Feeding the World

Third Quarter:

**Unit 6: Energy Resources and Consumption**

The sixth unit considers nonrenewable fossil fuels, radioactive fuels, and renewable sources. Students will also explore the reasons for energy demands and the merits and drawbacks of various potential energy portfolios.

* Nonrenewable Energy Sources
* Achieving Energy Sustainability

**Unit 7: Pollution**

The seventh unit has three foci: It explores how pollutants adversely affect our water and air; it looks at solid waste generation and our choices for solid waste disposal; it examines the leading human health risks (and emerging diseases) stemming from pollution.

* Water Pollution
* Air Pollution and Stratospheric Ozone Depletion
* Waste Generation and Disposal
* Human Health and Environmental Risks

Fourth Quarter:

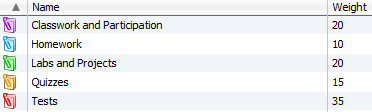
**Unit 8: Global Change**

The eighth unit unites concepts from earlier in the year with a focus on how human actions influence global change and affect conservation efforts, economics, and equity.

* Conservation of Biodiversity
* Global Change
* Sustainability, Economics, and Equity

Other Important Information

* **Exam Date**: May 4th at 8 am.
* **The course is weighted as follows**:



* **Homework Policy:**

**Daily Homework:**

The point of daily homework is to advance a student’s learning through independent practice and/or exploration. Homework and classwork are often intertwined and homework provides the catalyst for a day’s lesson. We will therefore not accept late homework; students who turn in completed homework on the day it is due (the degree of completion being the province of the teacher) will receive full credit; students who fail to turn in homework on the day it is due will not receive any credit for that daily assignment. Individual teachers will grant exceptions to this policy for illness, significant family events, or anything else a teacher deems worthy of exception.

**Long-Term Projects:**

Because we take seriously our responsibility to teach students how to manage their time and plan for a long term project, we take a different approach with anything that requires more than one or two days to complete. Students who complete a long-term project are eligible to receive full credit; students who hand in a long-term project one day late can receive no better than a B, and students who turn in a long-term project two days late can receive no better than a C. At the end of the two-day period, teachers may decide to give students partial credit for the work they have done on a project or they may decide to give a student a failing grade. Individual teachers will determine any exceptions for illness, significant family events, etc.

TL;DR

No late HW, but if you’re out a day (excused) you are granted a one day grace period for handing in what was due/newly assigned. For larger projects, each late day results in a 10% point drop in the maximum grade possible. After two days, the work might not be accepted.